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# Art. X.—*Australian Curculionidae of the Subfamily Gonipterides.*

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[Read 9th December, 1926.]

This subfamily of weevils appears to be confined to Australia, where most of the species feed on eucalyptus twigs and leaves. As adults many of them drop on the least alarm, but others cling so tightly that some force is needed to detach them, not infrequently one or more legs being broken in the operation. *Iptergonus cionoides* is abundant in some years near Sydney, but specimens seldom fall into the umbrella from plants beaten over it. Two characters appear to be constant in the subfamily.

1. A dense pad-like mass of clothing at the base of the prothorax, normally concealed when that part is closely applied to the elytra.
2. Each side of the metasternum abruptly vertical over the hind coxa, appearing as if with a conspicuous tubercle from the side.

All the genera contain species that are more or less densely covered with a meal, that is often of a rusty-red or ochreous colour. The meal often becomes greasy, and the grease holds dust, so that specimens often have a dirty appearance, and normal markings become obscured; occasionally the meal becomes caked, and conceals both derm and scales. On washing with chloroform, benzine, or other grease-absorbing liquids, the grease and meal are easily removed, but cleaned specimens often look very different from those on which the meal is in perfect condition. Washed specimens usually have more prominent eyes, owing to the removal of the meal that is normally present behind them. It is in fact difficult to keep the meal in good condition, and it is often left only in the punctures and other depressed spaces. I have often found it impossible to remove the grease without at the same time removing the meal. Where the necessary specimens are available it is always desirable to select two, agreeing as closely as possible, and to wash one of them with chloroform, etc. Scales and fascicles that on many specimens appear more or less rusty, after washing usually become snowy-white or silvery.

On most species of the subfamily the middle of the third and fourth segments of the abdomen is polished and glabrous. The second joint of the funicle appears to be usually longer than the adjacent ones.

In *Gonipterus, Oxyops* and *Iptergonus* many of the species (probably all of them) may be found in four apparent forms:—

1. Densely covered with a meal varying with the species from almost white to yellow, red, and muddy-brown, and partly or entirely concealing the derm and scales. Such specimens are usually in perfect condition when taken, but are especially liable to become greasy with age.
2. Irregularly covered with meal, mostly in depressed parts. These are usually specimens killed without being placed in liquids, and which, owing to a certain amount of rubbing have meal partly removed. With age they tend to become greasy, and the grease may discolour the meal.
3. No meal present, usually specimens that have been in alcohol for some time, when the whole of the meal is removed. Such specimens seldom become greasy, and the sculpture (but not the clothing, which is sometimes affected) is generally in perfect condition for examination. In weak alcohol, or after prolonged immersion, the scales may be stained or largely abraded.
4. No meal present, and often no scales on the upper surface, but the derm with a varnished or leaden appearance. This is apparently due to old age, and living specimens may be seen with it, sometimes in copulation with mealy ones. It occurs in *Catasarcus* and other weevils; and is not altered by washing with chloroform. In *Syarbis* a somewhat similar incrustation may be occasionally noticed, but may be removed. I have not seen it in *Pantorcites* or *Prophaesia,* although mealy specimens of both genera may be taken.

The punctures especially vary in appearance with the density of the meal and clothing, and on greasy and mealy specimens even large ones are often completely hidden. It is not always easy to connect the various forms, and in consequence some synonymy has resulted. With greasy, dirty or badly abraded specimens, it is often difficult or impossible to determine the species, and in collections it is desirable that many such should be left unnamed. Many specimens, however, may be improved in appearance by washing with chloroform.

Although some of the species, especially of *Gonipterus,* are very unsatisfactory, the genera (except that a few species are intermediate between *Gonipterus* and *Oxyops*) are easy of recognition, as is evidenced by the following table:—

A. Tarsi without claw-joint .. .. .. .. .. .. .. .. .. .. .. .. .. .. *Syarbis*
AA. Tarsi with claw-joint.
B. Club continuous with funicle .. .. .. .. .. .. .. .. .. *Bryachus*
BB. Club much wider than funicle.
C. Rostrum long and comparatively thin .. *Prophaesia*
CC. Rostrum short or comparatively short.
D. A conspicuous posthumeral tubercle on the submarginal interstice on each elytron *Gonipterus*

DD. Without such a tubercle.
  E. Eyes not prominent .. .. .. *Pantoreites*
  EE. Eyes very prominent.
    F. Intercoxal process of mesosternum pointed in front .. .. .. .. *Oxyops*
    FF. Process rounded in front *Iptergonus*

## *Notes on Table.*

D. The posthumeral tubercle is occasionally absent from *Gonipterus,* but on such species the intercoxal process of the mesosternum is not subacutely produced as it usually is in *Oxyops.* On many species of *Oxyops* there is a cluster of granules at the position of the tubercle of *Gonipterus,* but not a strong isolated tubercle. Pascoe considered that *Oxyops* and *Gonipterus* were not both needed, but there are many species of both that may be readily identified generically.

EE. On several species of *Oxyops* the eyes are but little more prominent than in *Pantoreites,* but the two genera are abundantly distinct.

*Minia* not included as unknown to myself, and its subfamily doubtful.

Following is a list of the species, with their known geographical distribution.

### **Oxyops**, Schon.

| | |
|---|---|
| alphabetica, Lea | Q., S.A., C.A. |
| amplipennis, Lea | N.S.W. |
| arcifera, Pasc. | Q. |
| aulica, Pasc. | Q., N.T. |
| *interrupta*, Blackb. | |
| bilunaris, Pasc. | Q., N.S.W., V., S.A. |
| calida, Pasc. | N.W.A. |
| clathrata, Boh. | S.A. |
| concreta, Pasc. | Q., N.S.W. |
| crassirostris, Pasc. | V., S.A., W.A. |
| *crassicornis*, Mast. | |
| decipiens, Lea | Q. |
| excavata, Boi. | Q., N.S.W. |
| *favosa*, Boh. | |
| farinosa, Pasc. | V., S.A., W.A. |
| fasciata, Boi. | Q., N.S.W., V., T., S.A., W.A., N.W.A., N.T., C.A. |
| *obliquata*, Boh. | |
| *parallela*, Blackb. var. | |
| fasciculata, Redt. | Q., N.S.W., V., S.A. |
| *maculata*, Blackb. | |
| florea, Pasc. | W.A. |
| frenchi, Lea. | Q. |
| gemella, Pasc. | V., S.A., W.A. |
| griffithi, Lea | Q. |
| grisea, Lea | Q. |
| hopei, Boh. | Q., S.A. |
| hyperoides, Pasc. (*Gonipterus*) | Q. |
| *simplex*, Lea | |
| irrasa, Pasc. | Q., N.S.W. |

| | |
|---|---|
| marginalis, Pasc. | Q., N.T., N.W.A. |
| *armata*, Blackb. | |
| mastersi, Pasc. | N.S.W., S.A., N.W.A. |
| meles, Pasc. | W.A. |
| memnonia, Pasc. | W.A. |
| modesta, Lea | N.S.W., V. |
| modica, Blackb. | N.T. |
| mucronata, Lea | Q. |
| multidentata, Lea | N.W.A. |
| niveosparsa, Pasc. | Q. |
| nodicollis, Lea | Q. |
| pallida, Lea | N.W.A., N.T. |
| parvicollis, Lea | Thursday I. |
| pictipennis, Blackb. | V., S.A., W.A. |
| *serricollis*, Lea | |
| placida, Blackb. | N.S.W. |
| posticalis, Lea | S.A., W.A., C.A. |
| pruinosa, Pasc. | Q., N.W.A. |
| reticulata, Boi. (*Gonipterus*) | N.S.W., S.A. |
| *cancellata*, Boh. | |
| rufa, Lea | N.S.W., V. |
| rutila, Pasc. | W.A. |
| scabra, Lea | Q. |
| scabrosa, Boi. (*Gonipterus*) | Q., N.S.W. |
| *squamulosa*, Boh. | |
| scoparia, Lea | V., S.A., W.A. |
| sepulchralis, Pasc. (*Gonipterus*) | S.A. |
| sicca, Blackb. | N.T. |
| soror, Lea | Q., N.W.A., C.A. |
| sparsuta, Pasc. | W.A. |
| spencei, Blackb. | N.T. |
| tuberculata, Perr. | Australia |
| turbida, Pasc. (*Gonipterus*) | N.S.W., V., S.A., N.W.A., N.T., C.A. |
| *obscura*, Blackb. (*Medicasta*) | |
| *minuscula*, Lea | |
| *uniformis*, Lea | |
| vacillans, Lea | Q., S.A., W.A. |
| vitiosa, Pasc. | Q. |

## **Gonipterus**, Schon.

| | |
|---|---|
| balteatus, Pasc. | Q., N.S.W., V., S.A. |
| cinnamomeus, Pasc. | Q. |
| citriphagus, Lea | W.A. |
| crassipes, Lea | Q., N.S.W. |
| exaratus, Farhs. | Australia |
| excavifrons, Lea | Q., N.S.W., S.A. |
| ferrugatus, Pasc. | Q., N.S.W. |
| geminatus, Lea | N.S.W. |
| gibberus, Boi. | N.S.W., V., T., S.A. |
| lateritius, Blackb. (*Oxyops*) | W.A., N.W.A., N.T. |
| lepidotus, Gyll. | Q., N.S.W., V., T. |
| notographus, Boi. | Australia |
| pulverulentus, Lea | N.S.W., V. |
| rufus, Blackb. | Q., N.S.W., V., T. |
| scutellatus, Gyll. | Q., N.S.W., V., T. |
| suturalis, Gyll. | N.S.W., V., S.A. |
| xanthorrhoeae, Lea | N.S.W. |

## **Bryachus**, Pasc.

| | |
|---|---|
| squamicollis, Pasc. | Q., N.S.W., V., S.A., W.A., N.W.A., C.A. |

## **Iptergonus**, Lea.

| | |
|---|---|
| aberrans, Lea (*Oxyops*) | W.A. |
| bifurcatus, Lea | Q. |
| cionoides, Pasc. (*Gonipterus*) | N.S.W. |
| niveopictus, Lea | N.S.W. |

## **Pantoreites**, Pasc.

*P. breweri* has been transferred to *Lycosura.*

| | |
|---|---|
| arctatus, Pasc. (*Oxyops*) | V., S.A., W.A., C.A. |
| *brevicollis*, Lea | |
| cretatus, Pasc. | W.A. |
| illuminatus, Lea | V., T., S.A. |
| major, Lea | V., S.A. |
| micans, Lea | W.A. |
| scenicus, Pasc. | N.S.W. |
| trilinealbus, Lea | N.S.W. |
| trivirgatus, Lea | W.A. |
| virgatus, Pasc. | S.A., W.A. |
| vittatus, Pasc. | N.S.W. |

## **Prophaesia**, Pasc.

| | |
|---|---|
| albilatera, Pasc. | S.A. |
| *Pantoreites longirostris*, Lea. | |
| florea, Pasc. | W.A. |
| confusa, Pasc. | T. |
| cretata, Pasc. | V., S.A. |

## **Syarbis**, Pasc.

| | |
|---|---|
| alcyone, Lea | N.S.W., V., T. |
| deyrollei, Roel. (*Acroteriasis*) | Australia |
| emarginatus, Roel. (*Acroteriasis*) | W.A. |
| eucalypti, Lea | N.T. |
| fasciculatissimus, Lea | N.W.A. |
| gonipteroides, Pasc. | W.A.. N.W.A., C.A. |
| goudiei, Lea | V., S.A. |
| haagi, Roel. (*Acroteriasis*) | N.S.W. |
| *plumbeus*, Lea | |
| *sciurus*, Pasc. var. | |
| nervosus, Pasc. | Q., N.S.W. |
| niger, Roel. (*Acroteriasis*) | N.S.W. |
| *plumbeus*, Lea | |
| nubilus, Roel. (*Acroteriasis*) | Q., N.S.W., V., N.T. |
| *brevicornis*, Lea | |
| pachypus, Pasc. | Q. |
| porcatus, Lea | N.S.W., S.A., W.A. |
| pulchellus, Lea | W.A. |
| pulchripennis, Lea | N.W.A. |
| punctipennis, Roel. (*Acroteriasis*) | Australia |

| | |
|---|---|
| sciurus, Pasc. | W.A., N.W.A. |
| semilineatus, Pasc. | W.A. |
| simulans, Lea | N.S.W. |
| subnitidus, Roel. (*Acroteriasis*) | Australia |

### **Minia**, Pasc.

| | |
|---|---|
| opalescens, Pasc. | N.S.W. |

I have to thank Mr. Gilbert J. Arrow and Dr. G. A. K. Marshall, of the British Museum, for information as to some types in that Institution.

### Oxyops reticulata, Boi.

Two specimens of this species, from the Blue Mountains, are slightly smaller (9 mm.) than usual, and have the elytra with thin scales forming a fairly distinct fascia at the summit of the apical slope; on many specimens this fascia is not traceable, and it is usually very feeble. Two specimens of normal size, from Sydney, have the prothoracic granules and elytral punctures larger than usual, and the elytra have two subapical tubercles that are hardly indicated on others.

### Oxyops scabrosa, Boi. (*Gonipterus*).

### *O. squamulosa,* Boh.

The description of *O. scabrosa*, an unusually lengthy one for Boisduval, makes it practically certain that it was founded upon the same species as *O. squamulosa*, over which it has precedence.

### Oxyops fasciata, Boi.

### *O. parallela,* Blackb. var.

The type and a co-type of *O. parallela* are in the South Australian Museum, and I think they should be regarded as representing a variety of *O. fasciata;* they differ from most specimens of that species in the derm being of a dingy reddish-brown, instead of jet black (when the meal has been removed), and the third interstice is more strongly ridged, or with an elongated tubercle, near the base, and again about the summit of the apical slope. It has been already noted (1) that the length given in the original description should have been four lines, not two. A specimen from Queensland (Somerset), probably represents another variety; it is smaller (7 mm.) than usual, and has the tips of elytra more conspicuously mucronate; is of a dingy brown (except that the pronotum is blackish), and has a greater area about the scutellum clothed with whitish scales; but the postmedian fascia is normal. In the Queensland Museum there are three specimens, from Brisbane, that are decidedly wider than is usual in *fasciata.* In the South Australian Museum there is a specimen of *fasciata* from Charters Towers, in which the colour is almost identical with the types of *parallela*, but the third interstice is normal. A specimen from Oodnadatta is normally dark, but has the elevations of the third interstice even more pronounced than on *parallela*. The scales composing the postmedian fascia also vary; on some they are shorter and fully twice as wide as on others. Cleaned specimens, with snowy-white scales, look very different from others densely covered with a rusty-looking meal, although this seems to be more easily lost than on many other species.

### OXYOPS CLATHRATA, Boh.

The description of this species, except for the rostrum, reads as if it might have been founded upon a specimen of *O. farinosa*, from which the meal had been entirely removed (by immersion in alcohol, etc.). The rostrum, however, was described as unicarinate, and in *farinosa* it is tricarinate, the median carina well-defined, the others feeble and oblique. If the names are synonymous *O. clathrata* has priority. I have seen the name applied to *O. reticulata*, but that can hardly be correct, as each elytron has two tubercles on the apical slope.

### OXYOPS PRUINOSA, Pasc.

Specimens of this species in perfect condition are so densely covered with ochreous-grey or ashen meal that the derm is concealed, except that a few granules and the median carina are visible on the pronotum; on being partly removed the alternate interstices of the elytra show up conspicuously, but the punctures usually remain full; on washing the elytra to remove the meal, the alternate interstices are seen to be distinctly elevated and granulate, although not throughout; the basal half has large punctures, often ringed with granules, and in places there are slight granulate elevations connecting the raised interstices; posteriorly, however, the elevations (except for a tubercle on the fifth interstice) decrease, and the punctures become smaller; there are numerous minute scales on the elytra that are normally concealed. Of this species I wrote to Mr. Arrow that " Blackburn and I separately identified the same species as *pruinosa* Pasc.; his specimens were almost completely covered with meal, mine were partly cleaned, and I washed one with chloroform to remove the whole of the meal. These specimens look very different. Do you think from comparison of the types, that it is the same as *calida?* Both are large, from Nicol Bay, and from the descriptions I imagined they might be the same with the clothing and meal differently preserved." In reply Dr. Marshall wrote: " The differences between *calida* and *pruinosa* are not due merely to the efflorescence. The unique type of *calida* is a female, and differs from the unique male of *pruinosa* in being distinctly broader; the elytra have more prominent humeral angles, and on each there are two slightly raised oblique lines, one at about the middle and the other behind;

on the dorsal surface all the scales are slightly but constantly narrower; the mesosternal process is longer and sharper; and the apical mucro on the hind tibiae is shorter. These may all be individual or sexual differences, but it would be unwise to unite the species until this has been confirmed by examination of more material. A female in the British Museum from Alexandria, identified by you as *pruinosa,* has the elytra somewhat more elongate than in *calida,* with the humeral angles much sharper, and the scales are much longer and thinner, being practically setiform. This seems less likely to be the true female of *pruinosa* than is *calida.* If not a distinct species, it must be at least a well marked subspecies. But it is difficult to reach a decision without much more material." In an additional note Dr. Marshall wrote, "*O. calida,* female, is extremely close to *pruinosa,* male, and may be only the other sex; the sculpture is coarser, the raised areas being rather more raised; the scales on the elytra are rather narrower, the scales on the venter are uniformly narrow, whereas in *pruinosa* there are narrow and broad scales intermingled."

### Oxyops farinosa, Pasc.

In previously commenting on this species (2) I stated that the tibiae were "entirely without the numerous small teeth so common in the subfamily." This is incorrect: there are some small teeth there, but they are normally almost or quite concealed by the clothing. On washing with chloroform the meal may be entirely removed, when the body is seen to be entirely deep black, and clothed with rather long setae, except on the elytra, where the clothing is very short. On cleaned specimens (as on many others of the genus) the true fourth joint of the tarsi appears as a minute basal portion of the claw-joint. The species occurs in many parts of Western Australia, South Australia (including Kangaroo Island), and Victoria.

### Oxyops aulica, Pasc.

*O. interrupta,* Blackb.

A large species, extending to 18 mm., although usually somewhat smaller. When in perfect condition the surface is almost completely concealed by meal. This is of one colour on the individual, but varies from a bright ochreous to dark brick-red or a muddy-brown (the latter probably discoloured). On removing the meal the elytra are seen to be clothed with small scales, and the raised interstices to have numerous granules; the larger punctures are also ringed with granules. From most of the large species it is distinct by the prominent humeral tubercle, which is often subacute, although less acute than in *O. marginalis* (a much smaller species). *O. pruinosa,* in which the shoulders are somewhat similar, is without a distinct tubercle between each shoulder and the suture. Three specimens of *O. aulica,* in the Blackburn collection, were placed as *O. excavata,* but the latter species, as identified in my collection, differs in the rostrum, pronotum, and particularly in the elytra.

The type of *O. interrupta*, in the South Australian Museum, in 1926 was so greasy and dirty that it was necessary to wash it with chloroform; on this being done it became evident that it was a small specimen of *aulica*.

### OXYOPS GEMELLA, Pasc.

In general appearance many specimens of this species approach those of *O. crassirostris*, and the appearance of both is considerably altered by immersion in alcohol,, partial abrasion, etc.; but they may be readily distinguished, *inter se*, by the rostrum, that of *gemella* being parallel-sided, or slightly narrowed to the apex, and that of *crassirostris* being shorter and slightly dilated in front; specimens of the latter species often have, when in perfect condition, a long ridge of white setae on the third interstice, crowning the apical slope, and a shorter one on the fifth (the two sometimes connected), as they are depressed they can hardly be regarded as fascicles. In *gemella* there is usually an irregular patch of scales crowning the apical slope, but it is more oblique, and composed of shorter scales. Two specimens doubtfully identified by Blackburn (3) as *O. florea* belong to *gemella*.

### OXYOPS BILUNARIS, Pasc.

Two specimens in the National Museum, from Victoria, are densely covered with a pale ochreous or chalky meal, concealing most of the clothing or derm, but leaving two large round blackish spots on the elytra, behind which the semilunar white marks, typical of the species, may be traced. From other specimens the meal is entirely absent, the round patches are deep black and very conspicuous, and the semilunar marks are of a snowy whiteness. Even on badly abraded specimens the round spots can be traced, and the semilunar white marks are seldom completely absent.

### OXYOPS MARGINALIS, Pasc.

*O. armata*, Blackb.

Dr. Marshall, from comparison of the types, confirmed my conjecture that these names are synonymous.

### OXYOPS TURBIDA, Pasc. (*Gonipterus*).

*Medicasta obscura*, Blackb.

*O. minuscula*, Lea.

*O. uniformis*, Lea.

This species is one of the most widely distributed of the genus; specimens before me are from South Australia (Ardrossan, Murray Bridge, Tanunda, Blanchetown, Lyndoch, Ooldea, Oodnadatta, Hergott); Victoria (Sea Lake, Grampians), New South Wales (Mulwala, Tamworth); North Western Australia (Fortescue River and Murchison). The average size is about 6 mm., but it varies from 5 to 7. Fresh specimens are more or less covered with a rusty coloured meal, that partially conceals the clothing and derm; on many such specimens, however, a vague dark cross may be seen on the elytra. On removing the meal the scales are seen to be white, and to form three vittae on the pronotum and irregular fasciae on the elytra; a vague white cross on the elytra may often be noted. On the elytra the third and fifth interstices are but slightly elevated, more noticeably so at the summit of the apical slope, where the third often has a subfasciculate appearance. Specimens differ greatly in appearance with the partial removal of the meal and scales. *O. minuscula* has already been noted as a synonym, and *O. uniformis* has now to be added.

The above note was prepared recording *O. minuscula* and *O. uniformis* as synonyms of *obscura*. Dr. Marshall now informs me that they are synonyms of *Gonipterus turbidus*, which is an *Oxyops*.

### OXYOPS SPARSUTA, Pasc.

Black, squamose and mealy.

Rostrum distinctly transverse, in front with rather small naked punctures, becoming larger and partly concealed elsewhere, with a short flat median carina, beginning immediately in front of an interocular groove. Antennae moderately thin, no joint of funicle distinctly transverse. Prothorax moderately transverse, sides rounded, base distinctly wider than apex; with large punctures, margined with granules, and with a short median carina. Elytra much wider than prothorax, shoulders somewhat thickened, beyond these parallel-sided to apical third, with rows of large, oblong, jagged punctures, becoming smaller posteriorly; interstices densely granulate. Mesosternal process well produced. Tibiae multidenticulate. Length, 7·5-9 mm.

Western Australia: Cunderdin, in September and October, Kellerberrin, Kalgoorlie, Mullewa and Ankertell.

Very distinct from all other species before me. The body parts appear to be always deep black, but the joints of the funicle are sometimes obscurely diluted with red. The meal varies from a muddy-yellow to yellowish-brown, and when dense, greasy or caked, fills many of the punctures and obscures the scales. The latter are really snowy-white; on the upper surface they are all pressed close to the derm, and are mostly rather wide; on the under parts they are mostly thinner. On the pronotum they form five feebly defined lines; on each elytron they appear as wide margining lines of black spots; four close to the suture, and four towards the side, the largest one is postmedian, and is sometimes connected with one on the side; occasionally there are ten spots on each elytron. On specimens in

### Oxyops pictipennis, Blackb.

### *O. serricollis,* Lea.

Two specimens, from Victoria and Kangaroo Island, appeared to agree with the description of *O. pictipennis;* they are bright red, with jet-black markings on the prothorax and elytra. They were seen subsequent to my description of *O. serricollis,* but considering that they were really immature specimens of that species, I asked for specimens to be compared with the type, and in reply Dr. Marshall wrote: " The darker specimen of *O. serricollis* from Kangaroo Island agrees well with the type of *pictipennis,* except that the latter is smaller and the setae on the elytra are slightly narrower. *O. irrasa* Pasc. (a female) is closely allied but distinct; Pascoe had actually associated with the type a black specimen of *pictipennis.* In *irrasa* the antennae are black, proportionately shorter and stouter, joint 2 of the funicle being shorter than 3+4 (equal to 3+4 in *pictipennis*); the frontal fovea is much larger and deeper, and the vertex is clothed with broad flat scales; the punctures and granules on the prothorax are somewhat fewer and larger; the elytra are broader and more quadrate, with the sculpturing very similar, but there are several dense tufts of long, ribbon-like erect scales; the bare impunctate patch in the middle of the venter is much larger, occupying one-third of the width on ventrites 3 and 4, and extending forwards to the middle of ventrite 2; the clothing of the lower surface consists of large broad flat scales, alternating with stout suberect setae." Fresh specimens are moderately covered with a brick-coloured meal. The derm on mature specimens is usually deep black, but on many is of a more or less dingy brown; in many the elytra appear to be black, irregularly mottled with red, or red mottled with black. On washing with chloroform all the scales are seen to be white. Several specimens have some loose fascicles of long setae on the elytra.

### Oxyops sicca, Blackb.

A co-type of this species, in the National Museum, is fairly close in appearance to some specimens of *O. fasciata,* but the post-median fascia instead of extending forwards from the suture, is extended backwards from it; each elytron, as viewed from the side, appears to have two black spots, due to absence of clothing, one at the middle (filled with large punctures; from above this appears as an obtuse-angled triangle, forming, with its mate on the other elytron, an arrow-head), the other on the apical slope. A partly abraded specimen, without locality label, also in the National Museum, possibly belongs to the species, but the third interstice is strongly elevated at the base, again at the summit of the apical slope and moderately between, the fifth and seventh are somewhat elevated from beyond the middle to near the apex. On the co-type the third is only moderately elevated in parts, and the fifth and seventh are scarcely elevated above the adjoining ones.

good condition, but which have been soaked in chloroform, the spots are quite sharply defined, they vary somewhat in extent but not in disposition; even on old and greasy examples they are usually sufficiently distinct. On clean ones the granules are very distinct, especially on the bald parts. The body parts appear to be always deep black, but the joints of the funicle are sometimes obscurely diluted with red.

The above description was drawn up under the impression that the species was a new one, with a very short rostrum as in *O. sparsuta,* but differing from it in not having the scales of the upper surface "very slender bristle-like." Some specimens that were sent for comparison Dr. Marshall labelled "*Oxyops sparsuta* Pasc. var," and wrote of them, "Agrees with *O. sparsuta* Pasc., except that in your insect the scales are more elongate and less regularly elliptical, and the pattern is more sharply defined." Commenting on the species in a list, Mr. Arrow wrote, "Extremely like *O. florea* Pasc., but with roundish scales."

### OXYOPS SEPULCHRALIS, Pasc. (*Gonipterus*).

The original description of this species is insufficient for its certain identification, and implies ("squamulis griseis rarissime dispersis") that the type was badly abraded. Dr. Marshall writes that, "The type is a much abraded and dirty specimen. The posthumeral tubercle is absent, but there is a small conical projection on the mesosternal process, so that it should be transferred to *Oxyops.* In general form it looks like a small specimen of *O. crassirostris* Pasc., but the rostrum is longer than broad, the pronotum is not flattened, and sculpturing of the elytra less coarse, the basal tubercles being much reduced."

### OXYOPS FLOREA, Pasc.

I wrote to Mr. Arrow, "Blackburn identified, with doubt as *florea,* the species you sent to me as *gemella.* I shall be glad if you will compare the types, particularly in the rostrum and third and fifth interstices of elytra, and let me know if you consider them synonyms." In reply, Dr. Marshall wrote, "*O. florea* and *O. gemella* are quite distinct.

"*O. florea.*—Longitudinal dorsal outline of rostrum strongly convex; eyes nearly flat; joint 3 of funicle nearly as long as 4; scales above and below comparatively long and narrow, most of them more or less raised, and some even suberect; the dorsal surface more rugose and with conspicuous shining granules.

"*O. gemella.*—Dorsal outline of rostrum flat; eyes strongly convex; joint 3 of funicle much shorter than 4; scales above and below much shorter and broader, all closely recumbent; the dorsal surface less rugose, the granules much flattened and nearly obliterated. A distinctly smaller insect."

### OXYOPS SOROR, Lea.

Fresh specimens of this species are densely covered with a pale ochreous (almost stramineous) meal, in parts completely concealing the scales and derm; on being washed with chloroform the surface is seen to be almost evenly clothed with snowy-white scales, somewhat smaller on the elytra than on the pronotum.

### OXYOPS MODESTA, Lea.

Victorian specimens of this mountain species, in the National Museum, vary in length from 7 to 10 mm.

### OXYOPS DECIPIENS, Lea.

Some specimens of this species, from Brisbane, are in better condition than the types; two of them are rather densely covered with a sooty-brown meal; a third has evidently been in alcohol, and is without meal, its clothing is almost snowy-white; its elytra have very large punctures in about ten rows, three or four deep, from about the basal third to beyond the middle, then there is a zigzag fascia with a lichenous appearance, beyond which part of the surface is again covered with large punctures.

### OXYOPS PARVICOLLIS, Lea.

Numerous specimens, recently taken on Thursday Island (the original locality), are rather densely covered with a snuff-coloured meal; to the naked eye each elytron appears to have two large, rusty-brown or blackish, transverse spots, one on the shoulder, the other just before the middle, the first extending to near the suture, the second to near the side. On removing the meal with chloroform the derm is seen to be intensely black, irregularly clothed with snowy-white scales. These are absent from a space on each elytron, resembling a C (commencing on the shoulder) on the right, or, on some specimens almost like an irregular O; behind it there is a conspicuous curved fascia of white scales (wider and less regular than on *O. bilunaris,* from which it also differs in many other respects). After washing, the prothorax appears to have four oblique black lines, due to granules showing through the scales, in addition to the median carina.

### OXYOPS SCOPARIA, Lea.

The derm of this species is usually of a dark reddish-brown, but it and the scales and fascicles are often partly obscured by a snuff-coloured meal. Some South Australian specimens, that were in alcohol for some months, are completely free from meal, two of them are of normal colour, but the other is much paler (almost castaneo-flavous); their punctures are all deep and sharply defined, and are close together, although nowhere confluent. Five specimens, from Western Australia, are much darker (two of them have the derm of the prothorax and elytra entirely deep black, and two are black except that most of the pronotum and the sutural region are reddish), and the fascicles crowning the tubercles are decidedly shorter (the five are alike in this respect, so it is evidently not due to abrasion). Specimens from which the scales and fascicles are abraded, are, in general appearance, close to those of *O. fasciculata* similarly abraded, but may be readily distinguished by the decidedly larger and sparser granules surrounding the elytral punctures.

### OXYOPS VACILLANS, Lea.

On fourteen fresh specimens of this species, from Western and South Australia and Victoria, the intercoxal process of the mesosternum is produced as on many species of *Oxyops,* but on ten of them the latero-posthumeral tubercle is quite that of a normal *Gonipterus,* so that quite justifiably it might be referred to either genus. The whitish sutural vitta has numerous short projections on each side, and as the suture itself is usually blackish, it has a quite characteristic appearance.

### OXYOPS AREOLICOLLIS, n. sp.

Dark reddish-brown. Densely clothed, multifasciculate and mealy.

Rostrum slightly longer than its subapical width, with a median depression obscured by clothing. Antennae rather short, fourth to seventh joints of funicle transverse, club short, its greatest width not twice that of the preceding joint. Prothorax about as long as wide, sides strongly rounded, granulate and strongly punctate. Elytra much wider than prothorax; with closely set rows of large punctures, each surrounded by small granules; fascicles supported on multigranulate elevations, especially those on the third interstice. Mesosternal process moderately produced and obtusely pointed. Tibiae with numerous small, but almost concealed teeth. Length (excluding rostrum), 7-8 mm.

Western Australia: Ankertell (H. W. Brown); Queensland: Cunnamulla (H. Hardcastle).

A rough strongly fasciculate species, allied to *O. fasciculata* and *O. scoparia,* but readily distinguished from both by the considerably wider funicle, which at first glance appears to be continuous with the club, although not as in *Bryachus squamicollis.* Fresh specimens are covered with an ochreous or brickdust-like meal, which causes the clothing to appear somewhat similarly coloured; but after washing with chloroform the clothing is seen to be almost snowy-white; on the under surface and legs it consists of stout setae or thin scales. On the pronotum there are three conspicuous lines of white clothing (the median one wider than the others), traversed by a line at the apex and another at the middle, so that the disc appears divided into four small squares, in addition a small square (partly visible from above) is marked off on each side of the base. The scutellum is densely clothed. The elytral clothing is rather sparse, except for the fascicles; of these there are from twelve to about fifteen on each elytron, the largest of all crowns the apical slope on the third interstice, and the longest is near its base. The clothing, however, is easily disarranged. The prothorax before abrasion appears slightly transverse, and the clothing obscures most of the punctures and granules, the latter on the sides are rather large and pointed; on the elytra there are numerous granules on the suture, but they are normally concealed, the meal also obscures many of the granules ringing the punctures, the granules being nearer those of *O. scoparia* than of *O. fasciculata.*

### OXYOPS MULTIARMATA, n. sp.

Dark reddish-brown. Squamose, fasciculate and mealy.

Rostrum slightly longer than the subapical width; punctures distinct in front, but partly concealed elsewhere. Antennae rather short, three apical joints of funicle transverse, and about half the width of club at its widest. Prothorax slightly longer than wide, sides strongly rounded; with large punctures and large subconical granules. Elytra much wider than prothorax; with rows of large punctures, ringed with small granules, in addition with numerous subconical tubercles; shoulders conspicuously armed. Mesosternal process moderately produced. Tibiae multidentate. Length, 7·5 mm.

Australia (J. Clark). Unique.

Readily distinguished from all the other fasciculate species by the numerous subacutely conical tubercles on the elytra, averaging about six on the odd interstices, from the third to the ninth. On *O. scoparia* there are many small pointed granules, all below the level of the tubercles supporting the fascicles; but on this species the tubercles are conspicuously above the support of the fascicles; these are also differently disposed and the shoulders are different. The fascicles, although conspicuous, have less elevated supports than those of the preceding species. The type being unique, was not washed with chloroform, but most of the meal (apparently of a muddy-yellow colour) has been removed and the clothing is seen to be white; on the under-surface and legs it consists of stout and fairly wide scales intermingled. From the prothorax the clothing appears to be partly abraded, but it was evidently dense in parts. On the elytra there are many small and several fairly large fascicles, of the latter four form a transverse series beyond the middle.

### OXYOPS INSIGNIS, n. sp.

Black. Densely clothed with white scales and setae, mixed with a pale brownish meal.

Rostrum slightly longer than its apical width, with a shining median carina, most of its surface concealed by clothing. Prothorax moderately transverse, surface very uneven, and with a distinct median carina. Elytra much wider than prothorax; with rows of large punctures; apex mucronate; each elytron with seven large tubercles, and with a conspicuous granulated ridge below the shoulder. Mesosternal process acute. Denticulations of tibiae concealed by clothing. Length, 14 mm.

Queensland: Townsville in August (F. P. Dodd). Type (unique) in British Museum.

The type being in almost perfect condition as regards its meal and clothing, was not washed with chloroform to enable the derm to be clearly seen, as the species is a very distinctive one by the seven large tubercles on each elytron; of these there are three on the third interstice, the largest of all subbasal, the second median, and the third crowning the apical slope; on the fifth interstice there are also three slightly posterior to those on the third, but in addition there is a fairly distinct but small one, halfway beween the first and second; the other large tubercle is humeral.

### OXYOPS TESSELLATA, n. sp.

Black, parts of antennae and of tarsi, obscurely diluted with red. Upper surface with small, round, glittering white scales, under surface with similar scales, mixed with thinner ones.

Rostrum strongly transverse; with comparatively small punctures, becoming larger near eyes. Antennae rather long and thin. Prothorax distinctly transverse, sides strongly rounded; with large punctures surrounded by distinct granules; median carina fairly long. Elytra much wider than prothorax; with rows of large, deep punctures, the interstices multigranulate; tips feebly mucronate. Mesosternal process well produced. Tibiae with close set but obscured denticulations. Length, 9 mm.

Western Australia: Kellerberrin, in January, on spearwood (J. Clark). Unique.

The rostrum is even shorter than on *O. sparsuta,* and its punctures are decidedly smaller. The scales on the elytra appear like small discs of mother-of-pearl, closely applied to the derm or inlaid. Many are quite circular; to the naked eye they cause the surface to appear speckled; on the pronotum they are usually less rounded, although mostly wide; and appear to form several feeble lines. A small amount of muddy-yellow meal was present on the type.

### OXYOPS LEUCOPHOLA, n. sp.

Black, parts of antennae and of legs obscurely reddish. Clothed with white scales and setae.

Rostrum slightly longer than subapical width; with coarse, crowded, partially concealed punctures, except in front, where they are smaller and naked. Antennae moderately stout. Prothorax slightly shorter than the base, but distinctly longer than apex, sides rounded; with crowded granules and a short median line. Elytra much wider than prothorax, sides decreasing in width almost from base; with rows of large, deep punctures, almost evenly decreasing in size posteriorly; interstices narrow and multigranulate, the odd ones slightly elevated; the third more noticeably near base than elsewhere (but not tuberculate), where the granules are unusually large and dense, shoulders thickened and with crowded granules. Mesosternal process acutely pointed. Tibiae multigranulate. Length, 9·5 mm.

New South Wales: Grenfell (Dr. E. W. Ferguson). Unique.

A speckled species due to numerous small clusters of snowy scales on the elytra. It is near *O. irrasa* and *O. pictipennis,* but the elytra are slightly more triangular in appearance, and are non-fasciculate (although the scales are not all placed singly), the pronotum has smaller granules and the rostrum is somewhat different. The type is without meal. The scales are white (on mealy specimens they would, no doubt, appear different); on the elytra they are of two kinds: stout and rather large ones, sloping at an angle of about 45°, and usually placed behind the punctures; and minute ones, closely applied to the derm; on the pronotum the scales are fairly large and form feeble lines; on the under parts the clothing consists of fairly stout setae interspersed with scales. The prothoracic granules are of several sizes intermingled, they appear to arise from an impunctate surface, or at least not to encircle punctures as on several other species.

### Oxyops carinirostris, n. sp.

Black, antennae and tarsi obscurely reddish. With white clothing.

Rostrum slightly longer than wide; apex with dense and minute punctures rapidly becoming coarser, but still glabrous to about middle, thence to base still coarser, but partly concealed by clothing; with a median carina from interocular groove to middle, where it ends in a cross piece. Antennae moderately thin. Prothorax slightly shorter than the base, which is distinctly wider than apex, sides rather strongly rounded; densely punctate and granulate, and with a short median carina. Elytra much wider than prothorax; with rows of large, deep punctures, becoming smaller posteriorly; interstices rather narrow and multigranulate, the alternate ones feebly elevated in parts, the third more noticeably near base, but not tuberculate there; tips scarcely mucronate. Mesosternal process well produced. Tibiae conspicuously multidenticulate. Length 8·5-9·5 mm.

South Australia: Kangaroo Island (A. H. Elston and J. G. O. Tepper).

In general appearance the three specimens taken are like small rubbed ones of *O. reticulata,* slightly less parallel-sided than usual; but they differ from that species in having the elytral punctures smaller, more regular, and more evenly ringed with granules, and the rostral carina in the form of an elongated T. All the specimens have some dark brown (almost black) meal. The clothing on the under surface is not very dense, and consists of long, thin, white setae, becoming denser on the legs; on the pronotum similar setae are fairly dense along the middle, and form two inconspicuous lines on each side; the elytra are glabrous, except for a few setae at the base and sides.

### OXYOPS SEMICIRCULARIS, n. sp.

Dark brown, some parts paler. Densely clothed with white scales, and heavily covered with pale meal.

Rostrum slightly longer than wide; apical half naked, and with dense punctures, basal half with coarser, partly concealed punctures, and with a thin median carina starting from the interocular groove. Antennae moderately long, no joint of funicle transverse, club rather long. Prothorax slightly transverse, sides rounded and slightly wider at base than at apex; densely granulate-punctate. Elytra much wider than prothorax, subparallel-sided to beyond the middle; with regular rows of large punctures, becoming smaller posteriorly; interstices mostly wider than punctures, the third somewhat elevated near base, with numerous minute granules. Mesosternal process moderately produced. Tibiae short, with numerous partly concealed denticulations. Length, 5·5-6·5 mm.

New South Wales: Bogan River (J. Armstrong); South Australia (National Museum), Ardrossan (J. G. O. Tepper).

Specimens in good condition are so densely covered with scales and meal that the derm is concealed, and the punctures, even on the elytra, are often completely filled; on all such specimens, however, there is a conspicuous black semicircle at the base of the elytra, enclosing a subquadrate, whitish scutellar patch; there may also be noticed three vague lines on the pronotum, where the scales are more condensed ,and a line of white scales on the apical half of the suture. On removing the meal with chloroform, the scales are seen to be white throughout, and the basal semicircle of the elytra (which then becomes ill-defined), is seen to be due to sparsity of clothing. On the pronotum the scales are dense, rather long and almost evenly clothe the surface, except that they are denser along the middle than elsewhere. On the elytra the scales are smaller than on the prothorax, and most of them project backwards from minute granules; on the suture and about the scutellum they are larger than elsewhere. Washed specimens, compared with washed ones of *O. obscura*, are seen to differ in having the clothing sparser (except on the suture), the antennae are longer and the club decidedly thinner; unwashed specimens are at once distinctive by the black semicircle.

### OXYOPS MICROLEPIS, n. sp.

Dark reddish-brown, antennae and tarsi (the claws black) paler. Densely squamose and mealy.

Rostrum slightly longer than wide; with small naked punctures in front, coarse and dense elsewhere. Antennae rather short, several joints of funicle transverse; club unusually short, being not much longer than its greatest width. Prothorax slightly transverse, base distinctly wider than apex; closely and evenly granulate-punctate. Elytra much wider than prothorax, feebly diminishing in width from shoulders to beyond the middle, tips scarcely mucronate; with rows of large deep punctures, becoming smaller posteriorly; interstices evenly convex, but the odd wider than the even ones, with numerous small granules; shoulders somewhat thickened and multigranulate. Mesosternal process moderately produced. Tibiae multidenticulate; basal joint of tarsi unusually short. Length, 5·5-6 mm.

South Australia: Oodnadatta; Northern Territory: MacDonnell Ranges (Blackburn's collection).

A small species, structurally close to *O. obscura,* but fifth interstice not elevated above the adjacent ones even near the base, and elytral scales uniformly disposed, except that they are denser about the scutellum than elsewhere. On washing with chloroform the elytra are seen to be nowhere subfasciate (as on *obscura*) or maculate. The elytral scales are individually much smaller and shorter than those of *obscura,* or the preceding species, being so short that (except a few near the suture) it would take several of them, placed end to end, to reach across the interstice on which they rest, whereas on those species most of the scales are at least as long as the interstices supporting them are wide; this is very conspicuous on washed specimens; on other part of the body the scales and setae are not so short. The scales are dense on most parts (less on the elytra than elsewhere), but they are so obscured by grease and meal on the only unwashed specimen in the collection, that on the pronotum no compacted lines are evident. The sutural interstice on each elytron is distinctly wider than the adjacent row of punctures, but many of these are wider than the adjacent interstices; their true sizes are normally concealed. The antennae are nearer those of *obscura* than the preceding species. *O. modica* has more prominent shoulders, less uniform elytral punctures and different clothing.

### Oxyops parvoscabra, n. sp.

Black, antennae and tarsi reddish. Moderately clothed with thin scales or setae, denser on under surface and legs than on upper surface; meal rather dense and snuff-coloured.

Rostrum with coarse, crowded and partly concealed punctures, except in front, where they are much smaller and naked. Prothorax slightly transverse, sides rounded and increasing in width to base; densely granulate-punctate. Elytra much wider than prothorax, subparallel-sided to beyond the middle; with rows of large, deep, rough punctures, becoming smaller posteriorly; interstices narrower than punctures except near apex, the alternate ones feebly elevated in parts, and all rather coarsely multigranulate. Mesosternal process moderately produced. Tibiae multidenticulate. Length, 6-7 mm.

South Australia: Ardrossan (J. G. O. Tepper).

A small species, slightly wider than *O. turbata;* comparing washed specimens together, those of the present species are seen to have larger elytral punctures with narrower interstices, the granules of which are larger, so that the general appearance is rougher; the basal joint of the front tarsi, although short, is distinctly longer than in *turbata,* the antennae are also longer, only the sixth joint of the funicle being feebly transverse. From *O. semicircularis, O. modica* and the preceding species, it is distinct by the much larger and rougher punctures and granules, and the narrower interstices. The scales and setae are really white, but the meal causes than to appear darker; on the pronotum a median line of clothing is fairly distinct, and one or two others on each side are sometimes traceable. On most parts of the elytra the setae are sparse and thin, but about the summit of the apical slope and near the middle the clothing is stouter than elsewhere, and forms feeble spots on the third and fifth interstices, it is also fairly dense about the scutellum. Each prothoracic granule contains a seta directed forwards or inwards, the containing punctures being quite distinct on washed and abraded specimens. The tarsi are usually, but not always, darker than the antennae.

### OXYOPS PLATYODONTA, n. sp.

Dark reddish-brown. Moderately clothed with rather long, thin, white setae, becoming denser on the under surface and legs.

Rostrum slightly longer than wide; with fairly coarse punctures becoming small in front; with a rather short carina starting from a deep interocular groove. Antennae moderately long, sixth and seventh joints of funicle feebly transverse. Prothorax almost as long as wide, sides parallel except near apex; with a short median carina and with dense granules, each containing a setiferous puncture. Elytra much wider than prothorax, feebly diminishing in width from near shoulders, with rows of large, deep, suboblong punctures, becoming smaller posteriorly; interstices usually wider than punctures, with numerous granules, third slightly elevated above the adjacent ones, near base thickened, more elevated and multigranulate, junction of third, fourth and fifth marked by a preapical callus. Mesosternal process acutely produced. Legs longer than usual; tibiae thin, denticulations inconspicuous; claws very wide and flat, suddenly becoming pointed at the tips. Length, 8 mm.

Northern Territory (Blackburn's collection from Dr. Bovill).

Readily distinguished from all other known species by the claws. The clothing consists entirely of thin setae.

### GONIPTERUS GIBBERUS, Boi.

There are before me nearly one hundred specimens of a species that is common in many parts of New South Wales, Victoria, and South Australia, and which vary in length, 7-10 mm., the average size of Tasmanian specimens being about a millimetre longer than mainland ones, but the smallest before me is from Tasmania. They all, unless badly abraded, have a conspicuous triangle of white clothing on each side of the elytra, wide on the sides and narrowing to the suture, which they may or may not reach, close behind the scutellum. They all have the posthumeral tubercle conspicuous. Some of them were named in my collection for many years as *G. exaratus*, but probably in error, as Fahraeus in his lengthy description of that species does not mention a white fascia or triangles. They are probably *G. gibberus*, of which Boisduval in unusually lengthy descriptions says, "*lateraliter obsolete albido fasciatis*"; also "*une bande blanchâtre, oblique et laterale*"; and "*une bande blanchâtre, large qui, partant du côté remonte sur l'élytre un peu au-delà du milieu.*" Boisduval also describes the elytra as having the first four rows of punctures, counting from the suture, as more distinct than the others, but their distinctness is dependent upon the scales and meal; he gives the length as four (French) lines, and the locality as New Holland. Fresh Tasmanian specimens are covered with a pale ochreous or almost stramineous meal, but it is lost in alcohol, and is seldom in good condition on old specimens, especially greasy ones, on which it is usually confined to the punctures. On washing specimens with chloroform the whole of the clothing is seen to be white, with the triangles conspicuous on account of the density of their clothing. On complete abrasion the derm, where the triangles used to be, is seen to be paler than the adjacent parts, and to have smaller punctures. I cannot satisfy myself as to the limits of the species, specimens of which range towards *G. balteatus*, and *G. pulverulentus*, either of which may be a variety; in *balteatus*, however, the fascia on each side is narrower than usual, and fresh specimens of it certainly look very different from ones with wide triangles; on *pulverulentus* the white markings always terminate some distance from the suture, and are widest about the middle instead of on the sides, and on fresh specimens the meal is of a dark dingy red. Some specimens also vary towards the species here regarded as *scutellatus*, but on that one the posthumeral triangles are usually inconspicuous, and often not traceable.

### GONIPTERUS NOTOGRAPHUS, Boi.

The original description of this species is quite useless. M. Lesne, from examination of the type, was able to supplement it with particulars (4), making it certain that it is a true *Gonipterus*, but even these are insufficient for its reasonable determination.

### GONIPTERUS SUTURALIS, Gyll.

Typical specimens of this species, in good condition, may be readily recognised by a conspicuous line of white scales, or stout setae, continuous from between the eyes to the tips of the elytra, but wider on the prothorax than elsewhere. It was named originally from New Holland; specimens now under observation are from New South Wales, Victoria and South Australia. Three specimens from Tasmania, identified by Blackburn as *G. scutellatus,* and two in Simson's collection similarly identified, agree perfectly in structure with normal specimens of *G. suturalis,* but the white line stops abruptly a short distance behind the scutellum. There are also many other specimens from Queensland, New South Wales, Victoria, and Flinders Island (Bass Straits), agreeing with the Tasmanian ones, or with the sutural vitta intermediate between them and typical *suturalis.* Many of them are covered with a rusty-red meal (probably all are normally so covered when young). I am satisfied that these specimens are not the *scutellatus* as identified by Dr. Marshall from South African specimens, but really represent *suturalis,* with the vitta not continuous.

### Gonipterus lepidotus, Gyll.

The description of this species might very well have been founded upon specimens of *G. suturalis,* with the white vitta stopping abruptly behind the scutellum. In the description the expressions "*humeris alte elevatis prominulis*" and "*callum humeralem*" might be regarded as not applicable of *suturalis,* one of the few species of which typical specimens may be identified with certainty; yet of *suturalis* itself Gyllenhal says, "*humeris alte elevatis prominulis,*" and "*pone callum humeralem.*" The shoulders of *suturalis* are almost square, and three striae terminate at each of them; they are also densely granulate (as is most of the surface), so that they appear somewhat thickened, but when viewed either from the sides, or directly from above, they do not appear to be strongly elevated above the adjacent parts; although when viewed obliquely from behind they certainly appear tuberculate. The type was from New Holland. If the names are synonymous *G. lepidotus* has precedence, although specimens with the sutural vitta continuous to apex might well be considered as var. *suturalis.* Specimens that I refer to the species are from Queensland, New South Wales, Victoria, Tasmania and South Australia.

### Gonipterus scutellatus, Gyll.

As instancing the difficulty that has occurred in connection with the correct name of a species of this genus that has unfortunately been introduced to South Africa, South America and New Zealand, reference may be made to an article appearing in *The Journal of the Department of Agriculture* at Pretoria, for November, 1924 (5), when not less than six specific and three generic names were considered in connection with it as follows:—

*Oxyops reticulata,* Boi. (formerly *Gonipterus*).
*O. cancellata,* Boh.
*Bryachus squamicollis,* Pasc.
*Gonipterus scutellatus,* Gyll.

*G. exaratus,* Fhs.
*G. rufus,* Blackb.

The species is a most difficult one to place from the original descriptions, but in the article Dr. Marshall is quoted as positively identifying it as *G. scutellatus,* from comparison with a co-type in the Oxford Museum. I do not think it wise to go beyond this identification, unless proved erroneous by examination of the type itself, although the description applies to several other species, quite as well as the one occurring in South Africa.

There are now before me twenty-five specimens, all taken on the same day at Rosebank, South Africa. They all have a wide median line of white setae on the pronotum, continued on to the scutellum, and for a short distance beyond it, a large and pale but vague triangle on each elytron, commencing behind the basal asperities, and continued on each side to slightly beyond the middle, the surface close to the triangle has somewhat sparser clothing than elsewhere, so that it is slightly accentuated; immediately beyond it, to the naked eye, there appears a feeble oblique dark stripe, but the triangles and dark stripes are often scarcely traceable even on nonabraded specimens; on some a feeble line of white clothing may be seen between the median one and each side of the pronotum. The base of each elytron (as seen obliquely from behind) appears to be conspicuously trituberculate, the tubercles covered with small black granules, the first on the third instertice, the second (and smallest) on the fifth, and the third the shoulder, with the conspicuous posthumeral tubercle typical of the genus. These tubercles, however, are much as on most species of the genus. The size ranges 6-8 mm. Other specimens before me are from Queensland, New South Wales, Victoria and Tasmania; the type was from New Holland.

Of the other names mentioned:—

*Oxyops reticulata* was originally referred to *Gonipterus,* but is a true *Oxyops.*

*O. cancellata* has been recorded as a synonym of *reticulata.*

*Bryachus squamicollis* has distinctive antennae.

*Gonipterus exaratus.*—For years I had in my collection specimens identified as belonging to this species, but which now are regarded as probably belonging to *G. gibberus.* In the original description no mention is made of white elytral triangles, or a fascia, and the description might well have been drawn up from specimens here regarded as *G. lepidotus.* It was compared with *G. scutellatus,* but the differences mentioned would be quite consistent with the type being a partly abraded specimen of that species; if synonymous *scutellatus* has precedence.

*G. rufus.*—Small specimens with the triangles ill-defined are difficult to distinguish from specimens of *rufus,* that have been in alcohol and are without meal, but on such specimens of that species the elytral clothing is uniform, and there are never even vestiges of triangles.

Of other species with which it might be confused—

*G. lepidotus.*—The species here so regarded is consistently larger and is without a pale triangle on each elytron, but the clothing of the prothorax and scutellum is much the same.

*G. gibberus.*—The species here so regarded, when in good conditon, has conspicuous triangles, but small and partly abraded specimens are often difficult to distinguish from *G. scutellatus.*

### GONIPTERUS CINNAMOMEUS, Pasc.

A beautiful species, varying in appearance with the condition of the meal; when this is removed the clothing appears of a snowy whiteness, forming five lines on the pronotum, and the elytra are seen to have some nude black or blackish irregular spaces (including the elevations), about the base and on the apical slope, these, however, being well indicated on fresh specimens. It appears to be confined to Queensland.

### GONIPTERUS BALTEATUS, Pasc.

Specimens of this species in good condition are covered with a rusty meal, through which a conspicuous vitta of white clothing shows on the scutellar region, shortly behind which it bifurcates to near the middle of the sides; the base of the elytra appears blackish, as also behind where the white stripes diverge, between each of these and the dark base, to the naked eye, the surface appears gradually paler. Specimens without meal are deep black, with white scales and a conspicuous oblique line of white on each side, often disconnected with the scutellum. The pronotum has fairly dense white scales, but not forming a distinct vitta.

### GONIPTERUS FERRUGATUS, Pasc.

Fresh specimens of this species have a conspicuously rusty appearance. The four prothoracic vittae noted by Pascoe are due to the irregularity of granules and punctures, and disappear when the scales are exposed through the removal (in alcohol, etc.) of the rusty meal; there is also a feeble median carina. A co-type, from the British Museum, has the intercoxal process of the mesosternum distinctly produced and pointed, much as on many species of *Oxyops,* but the general appearance and the strong, subconical, posthumeral tubercle are those of a normal *Gonipterus.* Some specimens from Brisbane and the Blue Mountains agree well with the co-type.

### GONIPTERUS LATERITIUS, Blackb. (formerly *Oxyops*).

The type of this species is in the South Australian Museum, and is certainly a small *Gonipterus,* having the conspicuous posthumeral tubercle typical of the genus. The intercoxal process of its mesosternum is feebly produced, but is not pointed (as it is in most species of *Oxyops*). Its rostrum is exceptionally short, being (near the apex) distinctly wider than long. It was very dirty, but, on being washed with chloroform, proved to belong to a species taken by Mr. W. D. Dodd at Derby, and of which forty specimens were preserved in alcohol for several months, thus removing all the meal. These specimens are almost uniformly clothed with depressed white setae, forming a median line on the pronotum, dense on the scutellum, and moderately dense on the shoulders. To the naked eye the elytra appear to have six nude spots, due to the clothing there being sparser than elsewhere; two at the base, and four on the apical slope, the latter forming the corners of a square; occasionally there are four feeble spots at the base or none, sometimes the upper two of the four apical spots are very feeble, and occasionally the two outer ones are almost conjoined. Two specimens were not placed in alcohol by Mr. Dodd, and have their meal in almost perfect condition; it is dense, dark stramineous or yellowish, and completely conceals the punctures, and much of the clothing, several dark spots being indicated on the elytra; they were pinned, and were rather greasy twelve years after capture. A specimen that was sent and agreed with them was washed with chloroform, and proved to be identical with the type and the other specimens sent. It is about the size of *G. cinnamomeus,* and is structurally close to that species, except that the shoulders are less prominent, and that the tubercle on the third interstice near the base is less conspicuous; the clothing also is different. A specimen from the Swan River probably belongs to the species, but its setae are shorter (more nearly approaching scales) and denser on the elytra.

### Gonipterus rufus, Blackb.

Fresh specimens of this species are densely covered with a rusty-red meal, becoming dark brown with age, or when greasy. The clothing is almost concealed, except that a white line is conspicuous from apex of prothorax to apex of scutellum. On complete abrasion the derm is seen to be red, or at most of a rather dark brown, so that such specimens, to the naked eye, almost resemble fresh ones. Those that have been in alcohol for some time, or that have been washed with chloroform, are seen to have white elytral clothing, moderately and evenly distributed, except that on the basal elevations it is sparser than elsewhere, and is nowhere condensed into spots; on the pronotum five rather feeble white lines may often be seen, but the sublateral ones are never sharply defined, and are often not traceable; on many even the median one is scarcely traceable. It is common in Tasmania and the mountain parts of Victoria and southern New South Wales.

Three specimens from Wyreema (Queensland) probably represent a variety of the species, but each posthumeral tubercle appears as a faint swelling only. On typical examples it is unusually prominent and conical, but it varies considerably on Tasmanian specimens, on some of which it is scarcely more prominent than on the Wyreema ones.

Four specimens from Launceston (Tasmania) probably represent another variety; they have the elytral clothing and punctures less uniform, the punctures being larger and many of them slightly encroaching upon the interstices, behind many of the punctures the setae are slightly condensed, causing a faint multimaculate appearance. The posthumeral tubercles are of normal prominence. The base of the head is black, as on most specimens of the species. They have not been in alcohol, and most of the meal is present on them. A specimen from the Victorian Alps evidently belongs to the same variety, but having been in alcohol the meal has been removed, and the multimaculate appearance of the elytra is more pronounced.

### GONIPTERUS CRASSIPES, Lea.

Of two types of this species one is slightly, and the other badly abraded. There are now before me seven specimens in perfect condition as regards the clothing (but they are without meal). They have a conspicuous white triangle of clothing on each elytron, but the triangle is larger than on the species here regarded as *G. gibberus,* and its point is aimed at a considerable distance behind the scutellum (about the middle of the suture, instead of near the scutellum or even conjoined with it), the punctures about it are much larger than on that species (although on *gibberus* they are decidedly larger about the triangles than elsewhere), and the elevations are consistently black; the clothing of the pronotum is practically uniform throughout, certainly not condensed along the middle. A specimen from the Blackburn collection was identified with doubt as *G. exaratus,* but it is badly abraded, and the triangles are but little evident, much as on the type. One of the fresh specimens is from Mackay (Queensland), the others are without locality labels.

### GONIPTERUS XANTHORRHOEAE, Lea.

A male from Australia, in the Blackburn collection, and another from Queensland, in the National Museum, may belong to this species, but they differ from the type (a female) in having the derm black, except that parts of the elytra are obscurely diluted with red, and the clothing is somewhat different. On the type, behind many of the large elytral punctures, there is a small cluster, not a fascicle, of white scales, giving a speckled appearance to the surface that is absent from the others. The type, however, has the elytra in perfect condition and densely mealy, which is not the case with the others.

### GONIPTERUS HUMERALIS, n. sp.

Dark reddish-brown, some parts almost or quite black. Moderately densely clothed with thin scales or setae, and covered with ochreous or snuff-coloured meal.

Rostrum about as long as wide. Prothorax about as long as the basal width, sides feebly diminishing in width from base to apical third, and then more strongly to apex; densely granulate-punctate. Elytra much wider than prothorax, tips obtusely mucronate, shoulders very prominent; with rows of large deep punctures, becoming smaller posteriorly; interstices multigranulate, the third with a conspicuous and moderately long tubercle near base, fifth with a small tubercle, between the one on third and shoulder; posthumeral tubercle very prominent. Mesosternal process not produced. Length, 7-8 mm.

New South Wales (National Museum and G. Masters); Queensland: Brisbane in January and February (Queensland Museum from H. Hacker).

The clothing consists of thin scales or setae, and is white (although normally obscured by meal) and rather dense on head and part of rostrum, along middle of protonum, on scutellum, on a subquadrate space on basal fourth of elytra, and on under parts. Seen from the side each elytron appears to have an oblique dark line (due to the setae there being smaller and sparser than elsewhere) from the suture to near the apex; as a result most of the elytron appears to be occupied by a large pale triangle, separated by the dark line from a very narrow apical triangle, and with the elevated basal parts dark. The elevated parts of the elytra appear to be always darker than the adjacent surface, although on several specimens the entire derm of the body parts appears to be blackish. The shoulders, and the tubercles behind them, are unusually prominent, the width across the former being almost twice that of the base of the prothorax; although each shoulder is not itself tuberculate, when seen from behind it appears as an even larger and more prominent tubercle than the one on the third interstice, and much larger although less acute, than the posthumeral one. *G. gibberus, crassipes,* and *pulverulentus* have much less prominent shoulders, and much smaller and more conspicuous triangles on the elytra; *G. scutellatus* has also much less prominent shoulders, with the triangles smaller and less defined. *G. cinnamomeus* has prominent shoulders, but they slope back from the base at an angle of about 45°; on the present species the base (except for the parts produced over the base of the prothorax) is almost straight; the clothing also is very different.

### GONIPTERUS INCONSPICUUS, n. sp.

Black or dark brown, antennae and tarsi (claws excepted) reddish. Moderately densely clothed with stout setae, becoming denser on under surface and legs; and covered with rusty or snuff-coloured meal.

Rostrum and prothorax as described in preceding species. Elytra much wider than prothorax, tips mucronate, shoulders rounded; with rows of large deep punctures, becoming smaller posteriorly; interstices multigranulate; third with a rather long obtuse tubercle, connected with base by a feeble ridge, fifth with a smaller tubercle between the one on third and shoulder; posthumeral tubercle large. Length, 7-8 mm.

Queensland: Gympie (Aug. Simson).

A rusty-looking, inconspicuous species, of which nineteen specimens were obtained, and which differ but little in size and appearance (allowing for post-mortem alterations in the meal and clothing). In general appearance they are much like *G. ferrugatus*, on a reduced scale, but on that species the intercoxal process of the mesosternum is distinctly produced (much as on *Oxyops*); on the present species it is decidedly shorter, and rounded in front. Structurally it is close to *G. scutellatus*, but the elytra are without the least traces of lateral triangles, and the median vitta of the pronotum is wider and less conspicuous. From the preceding species it differs in having elytra less narrowed posteriorly, shoulders rounded and less prominent, tubercle on third interstice near base smaller, and in the clothing. The clothing normally appears somewhat stramineous or pale brown (except on the under surface where it is mostly whitish), but on being washed with chloroform all the meal is removed, and it becomes white or almost so. On the pronotum it forms a wide median vitta and two narrow ones on each side, but the vittate arrangement is feeble and easily obscured; on the elytral interstices the clothing is almost uniform, but behind many of the punctures there are small clusters of scales (not fascicles) so that the surface appears feebly maculate.

### Var. BIMACULATUS, n. var.

There are before me seven specimens that appear to belong to this species, and which have similarly speckled elytra; but, in addition, they have a distinct dark spot on each elytron, slightly beyond the middle, on the third and fourth interstices; each spot is due to sparsity of clothing, and partly to the clothing itself being black, the elevated parts at the base and the shoulders are also partly clothed in black, this being very noticeable on washed specimens.

Queensland (National Museum), Mackay (R. E. Turner), Bowen (Aug. Simson), Dalby (Mrs. F. H. Hobler); New South Wales: Tooloom in January (Queensland Museum from H. Hacker).

### GONIPTERUS PARALLELICOLLIS, n. sp.

Black or blackish, antennae and parts of legs reddish. Setose, squamose and mealy.

Rostrum as long as its subapical width; with a feeble median carina, on each side of which is a shallow groove, bounded externally by an oblique ridge. Prothorax about as long as basal width, sides parallel to apical fourth, thence oblique to apex, with a short median carina; densely granulate-punctate. Elytra much wider than prothorax, tips very feebly mucronate, shoulders rounded and thickened; with rows of large, deep punctures, becoming smaller posteriorly; interstices multigranulate, third with a large obtuse tubercle near base, fifth with a smaller one; posthumeral tubercle large. Length, 7·5-9 mm.

South Australia (National Museum), Kangaroo Island (Blackburn's collection and A. M. Lea), Mount Lofty Ranges (J. G. O. Tepper).

A fairly large rough, rusty-looking species, in appearance close to *G. ferrugatus,* but the intercoxal process of mesosternum normal. Structurally it is close to *G. geminatus,* but the metasternum is without longitudinal tubercles. A large suddenly elevated tubercle, near the base of the third interstice distinguishes from *G. xanthorrhoeae;* on that species the third interstice is moderately elevated there, but more as the highest part of a gentle elevation, which is continued almost to the middle. It is also structurally close to *G. crassipes,* but that species has a conspicuous pale triangle on each elytron, on specimens in good condition. The prothorax is longer in proportion than on *G. inconspicuus,* and the rostrum is different. The meal is present although not very dense on four specimens, but absent from the others; on the basal and apical thirds of elytra it is of a rather dark red, on the median third and all other parts it is ochreous. The clothing (which is white when not obscured by meal) consists mostly of rather thin scales, on the elytra mixed with stouter ones, along the middle of the pronotum it becomes more setose in character. As on *inconspicuus* the elytra have a speckled appearance, owing to the compaction of scales behind many of the large punctures, the prothoracic clothing on some specimens seems to be in three or five obscure vittae. On the pronotum there is a faint depression on each side of the median carina, and another towards each side; as a result there appear to be four feebly elevated spaces, along which the granules are more conspicuous than elsewhere; but this appearance is obscured on washed specimens.

### GONIPTERUS CONICOLLIS, n. sp.

Blackish-brown, muzzle, antennae and legs paler. Moderately clothed with white scales and setae, becoming dense on the under parts.

Rostrum scarcely as long as the subapical width, apex red, shining and with small crowded punctures, with coarse, crowded, partially concealed ones elsewhere; with a basal furrow continued on to head. Prothorax about as long as the basal width, gently diminishing in width from base to apex, with a feeble median carina, densely granulate-punctate. Elytra as described in preceding species. Length, 9-9·5 mm.

Victoria: Fernshaw. Type in National Museum, co-type, I. 16119, in South Australian Museum.

Close to the preceding species, but rostrum without a median carina or oblique grooves, and its tip red; the prothorax is also less parallel-sided, and the median carina is thinner and less defined; in these respects it is close to *G. xanthorrhoeae,* but the tubercles on the third and fifth interstices near base are more conspicuous. The derm of the pronotum is obscurely reddish in the middle, and this part is rather densely clothed with setae, towards the sides the clothing is sparser but stouter, and lineate in arrangement; on the elytra the clothing is fairly dense on the apical slope, elsewhere it has a spotted appearance owing to the compaction of a few scales behind the large punctures. The three specimens before me were evidently preserved in alcohol, as they are entirely without meal.

### Gonipterus intermedius, n. sp.

Blackish; muzzle, under surface, antennae and legs more or less reddish. Moderately clothed with white setae and scales, becoming denser on under surface and legs.

Rostrum slightly longer than wide; muzzle red, glabrous, and with dense and small punctures, elsewhere with crowded and coarser ones. Prothorax about as long as the basal width, almost evenly decreasing in width from base to apex; densely granulate-punctate. Elytra much wider than prothorax, tips feebly mucronate, shoulders somewhat rounded; with rows of large punctures, becoming smaller posteriorly; interstices near base and apex wider than punctures, in middle parts about as wide, third with an obtuse tubercle near base, connected with base itself by a slight ridge, fifth with a small one near base; posthumeral tubercle represented by an obtuse swelling. Mesosternal process not produced. Length, 7-8 mm.

New South Wales: Dorrigo (W. Heron), Brooklana (W. W. Froggatt); Queensland: Mount Tambourine, in December (H. Hacker, in Queensland Museum).

With the general appearance of *G. inconspicuus,* but with the conspicuous posthumeral tubercle of that species represented by a feeble swelling that disappears posteriorly (as on many species of *Oxyops*); one specimen from Dorrigo, however, has it slightly more prominent than on the others. *Oxyops vacillans,* which may be considered a *Gonipterus,* has the suture with white clothing throughout, and the mesosternal process more produced. *G. excavifrons,* with the posthumeral tubercle feeble, is larger, elytra more parallel-sided, rostrum more largely excavated, and with different clothing. The specimen from Mount Tambourine and one from Dorrigo, have most of the derm of a livid brownish-yellow, probably from immaturity, the former specimen has the appearance of a spiracle on each side of the subapical segment of the abdomen, but it is almost certainly accidental. The clothing along the middle of the prothorax consists of stout setae, but about the coxae it becomes true scales; on the elytra it is fairly even on the interstices, but it has a spotted appearance, owing to a few scales becoming compacted behind many of the large punctures; the preapical callosities, although feeble, are indicated by small white spots. The median carina of the pronotum is ill-defined. Two of the specimens are rather densely covered with a chocolate coloured meal, partly obscuring the derm and clothing.

### IPTERGONUS ABERRANS, Lea.

A specimen from Three Springs (Western Australia) possibly belongs to this species, but differs from the type, and many other specimens, in having the median vitta occupying about one-third of the width of the pronotum (except close to the apex, where it is very narrow), instead of scarcely wider than the scutellum at the base; the medio-lateral patch on each elytron is larger, and the fascicles are larger; the third interstice is more elevated at the basal fifth, more conspicuously clothed with white scales, and at the apex of its elevated part is connected with the suture by a transverse patch of white scales.

### PANTOREITES ARCTATUS, Pasc.

Fresh specimens of this species are covered with a brick-dust-like meal; owing to the irregularity of the disappearance of this material, or to its becoming greasy, many specimens look very different from others that have been in spirits. Some specimens from the Northern Flinders Ranges (S. Australia) have the white scales on the pronotum much denser than usual, so that the median vitta, although quite as large as on ordinary specimens, is less conspicuous.

### PANTOREITES FUSIFORMIS, n. sp.

Black or blackish, antennae and tarsi obscurely reddish. Clothed with scales and setae, partly obscured by a yellowish or stramineous meal.

Rostrum evenly dilated from base to near apex, where the width is about two-thirds of the length; with crowded, partially concealed punctures, except about apex, where they are dense and small. Prothorax slightly longer than the basal width, almost evenly decreasing in width from base to apex; densely granulate-punctate. Elytra about one-fourth wider than prothorax, shoulders rounded, sides gently decreasing in width almost from base; with rows of large punctures, normally almost concealed; interstices wider than punctures, and densely and finely granulate. Length, 8-9 mm.

Western Australia: Cue (H. W. Brown).

About the average size of *P. major*, but that species has five conspicuous vittae on the elytra, all conjoined at apex, the intermediate ones commencing acutely near the shoulders; on the present species a semi-double one commences immediately behind a dark spot, due to naked punctures. Before washing mealy specimens the setae appear to be distinctly yellowish, but after washing with chloroform both setae and scales are seen to be snowy-white. The scales are dense on the head, scutellum, under surface and legs, form three conspicuous lines on the pronotum, on the elytra clothe the suture, fifth and sixth interstices from about the basal third, shoulders and sides; but on two unwashed specimens the upper surface appears clothed with white scales, except for a stramineous vitta on each side, extending from apex of prothorax to near apex of elytra. Although the elytra are distinctly wider than the prothorax, to the naked eye their outlines seem almost continuous with those of the latter. A specimen from Fortescue River (W. D. Dodd), appears to belong to this species; it was in spirits for some months, hence all the meal has disappeared; its upper surface has white clothing throughout, but the clothing being partly dense scales and thin setae, the parts clothed with the latter have a vittate appearance, the vittae placed as on the two unwashed Cue specimens; as on all the others, it has three naked punctures, about the middle at the basal third. A similar specimen is in the British Museum from Cossack.

## Prophaesia.

Referred by Pascoe to the Hyperides, but stated to be "very near *Hypera* and *Pantoreites.*" Of the latter he wrote, "I have no hesitation in referring it to the Gonipterinae." It appears to belong to the Gonipterides, and to differ from *Pantoreites* by the rostrum being longer. All the species known to me have the base of the prothorax bisinuate, with the concealed part densely padded, the mesosternum overlaps the hind coxae on each side (to about the same extent as in *Pantoreites,* but less than in other genera), the tibiae are strongly denticulate, and the specimens when fresh are all mealy; a combination of characters apparently confined to the Gonipterides.

### Prophaesia albilatera, Pasc.

*Pantoreites longirostris,* Lea.

At the time I named *P. longirostris* I was not aware that *Prophaesia* really belonged to the Gonipterides, and although the long rostrum certainly seemed out of place in *Pantoreites,* the other characters agreed so well that it appeared desirable to refer it to that genus. Dr. Marshall informed me that specimens of *longirostris,* sent for comparison, agreed with the type of *albilatera.*

### Prophaesia alba, n. sp.

Reddish, claws black. Densely clothed with white scales, the elytra with some naked punctures.

Rostrum about as long as prothorax, almost straight, with a feeble concealed median carina, and with crowded concealed punctures, except about muzzle, where they are small. Antennae rather thin. Prothorax about as long as the apical width, sides gently dilated to base; with crowded, concealed punctures. Elytra about one-third wider than prothorax, each side with a feeble posthumeral swelling; with rows of large punctures, mostly normally concealed. Length, 5-5·5 mm.

South Australia: Lucindale (B. A. Feuerheerdt).

Allied to *P. cretata*, but larger, prothoracic clothing thinner (approaching setae), elytra with scales only, and these more uniformly clothing the surface, so that (except on abraded specimens) only individual punctures appear naked, instead of large spots; on abrasion the punctures are seen to be large and in regular series, but they are mostly the width of or narrower than the interstices, and these are densely and minutely granulate. Seven specimens have the clothing in perfect condition, and on them the naked punctures are in irregular transverse series at the basal third, in the middle, and at the apical third, with a few near apex, but a slight amount of abrasion considerably alters their appearance; the entire pronotum is covered, but the clothing is denser along the middle than elsewhere. The seven specimens mentioned have the rostrum clothed almost to the tip, on two others with abraded elytra it is clothed only near base, but the difference may be sexual. They have probably all been in alcohol, but on one of them there is a slight amount of yellowish pubescence.

### PROPHAESIA TENUIROSTRIS, n. sp.

Dull reddish, claws black. Densely clothed with white scales and with a yellowish meal; each elytron with two large, oblique, bald spots.

Rostrum long, thin, cylindrical and slightly curved; with a thin carina on basal half; with crowded punctures, towards the base partially concealed. Antennae thin, inserted in middle of sides of rostrum. Prothorax about as long as basal width, which is considerably wider than apex; punctures normally concealed. Elytra elongate-cordate, about one-third wider than prothorax; with rows of large, round, deep punctures, much wider than interstices, but, except on the naked spots, almost or quite concealed. Length, 5-5·5 mm.

Western Australia: Cue (H. W. Brown).

About the size of the preceding species, but rostrum decidedly longer, prothoracic scales stouter, elytra with larger punctures and narrower interstices, and each with two large bare spots. These are obliquely placed at the basal and apical thirds, and (except for the sutural clothing) form a feeble cross, which is traversed by an irregular white fascia. From *P. cretata*, to which it is closer, it differs in being larger, each elytron with but two large naked spots, and the apical slope densely and uniformly clothed; the elytral clothing consists of scales only (although these vary in size), not of scales and setae. Specimens are normally covered with a yellowish meal, but on washing with chloroform this is removed, and the scales are seen to be snowy-white.

## Syarbis.

Specimens of this genus are often covered with a leaden-white kind of varnish, possibly due to some change in the meal; it is not due to old age, as the scales on such specimens are of normal density, even on some that have the upper surface completely covered by it.

### SYARBIS NIGER, Roel.

*S. plumbeus,* Lea.

Specimens before me are all from New South Wales: one agrees perfectly in structure and clothing with normal specimens, but is entirely reddish. I am now satisfied that the type of *S. plumbeus* is a varnished one of *S. niger;* a second specimen agrees perfectly with it, and both have the clothing of *niger;* a third agreed with them (except that it is somewhat paler), and on being washed with chloroform the varnish disappeared, leaving the typical clothing of *niger.*

### SYARBIS PORCATUS, Lea.

All the many specimens that I have seen of this species have five lines of scales on the pronotum. Three of it were standing in the Blackburn collection as *S. nubilus,* but of that species Roelofs says, "*Prothorace . . . vitta media lateribusque pallidis,*" and again, "*Prothorax . . . formant trois lignes parallelès.*"

### SYARBIS NUBILUS, Roel.

*S. brevicornis,* Lea.

Occurs in many parts of South Australia. Many specimens have a more or less conspicuous leaden " varnish " in parts. One (evidently immature) is of a bright pale chestnut-brown, without a trace of meal or varnish, but with normal clothing. Another from Queensland (Charters Towers) probably belongs to the species, but has the oblique fascia of scales on each elytron approaching more closely to the suture than is usual. With an extended series of specimens of *S. brevicornis* it is evident that they belong to *S. nubilus.*

### SYARBIS GOUDIEI, Lea.

A specimen of this species, from South Australia, was almost entirely covered with a leaden-white "varnish." On this being removed with chloroform the clothing was seen to be as on many others from South Australia and Victoria.

### SYARBIS ALCYONE, Lea.

On specimens of this species, in good condition, the elytra have no compacted scales except those forming a conspicuous whitish line on the suture. It appears to be possible that it is the same as *S. subnitidus,* if the type of that species had the sutural scales abraded; at least there are two specimens from the Blue Mountains that agree with the description of *subnitidus,* and appear to be *alcyone,* with the sutural scales abraded. A Victorian specimen without elytral scales, but evidently belonging to *alcyone,* was identified by Blackburn as " ?*deyrollei,*" but it can hardly be that species, which was described as of the shape of *S. niger* (a considerably narrower species).

### SYARBIS SCIURUS, Pasc.

A specimen from Mount Squires (Elder Expedition) identified by Blackburn, without comment, probably belongs to this species, as it has an oblique postmedian spot on each elytron, but the base is hardly darker than the adjacent parts. Its pronotum is densely covered with whitish scales, and with fairly large punctures, each of which contains a large scale.

### SYARBIS HAAGI, Roel.

Some specimens in the Macleay Museum, from North-Western Australia, were identified as *S. sciurus.* They have the base of the elytra conspicuously dark, and about one fourth of the apex (less at the suture and sides), but are without the postmedian spot noted as on that species. A specimen of the same species, from Onslow, in the National Museum, was identified as *S. sciurus* in the writing of Mr. C. French, Jr., but is in better condition, the dark base of the clytra being margined with strong scales: the dark apical part is partly covered with snowy scales, but a spot on each side of it is glabrous, margined with a ring of snowy scales. I believe these specimens represent a variety of *S. haagi,* the typical form of which has a much greater amount of both base and apex dark, leaving a conspicuous pale median fascia.

The ordinary length of Queensland specimens of *haagi* is about 5 mm. (as the type), but one from Magnetic Island is only 4 mm., and two from Charters Towers are 7 mm.

A specimen from Cape York, in the Queensland Museum, agrees so closely in structure with specimens of *haagi* that it does not appear to be distinct from that species. It is, however, of a rather pale castaneous, the elytra very slightly darker at base and apex than in the middle; its pronotum has three conspicuous lines of white scales, the median one of which is continued on to the scutellum.

### SYARBIS POSTHUMERALIS, n. sp.

Castaneous, a large median blotch on each elytron paler. With small white scales forming five lines (two of them feeble) on pronotum, dense on scutellum, forming many small transverse or oblique lines on elytra, and fairly dense elsewhere.

Rostrum slightly longer than wide, with a rather shallow groove, beginning at a conspicuous interocular fovea, apical third depressed and with smaller punctures than elsewhere. Antennae short, six apical joints of funicle transverse. Prothorax about as long as the basal width, evenly decreasing in width from base to apex; with fairly numerous large and small, irregularly distributed punctures. Elytra much wider than prothorax, about twice as wide as long; with rows of large, round, deep punctures, much wider than interstices, even posteriorly; with a conspicuous posthumeral tubercle interrupting a row of large punctures. Legs short, tibiae with a few strong denticulations. Length, 4·5-5 mm.

Western Australia: Swan River (J. Clark and A. M. Lea).

The only species of the genus with a conspicuous posthumeral tubercle, as on most species of *Gonipterus. S. gonipteroides* is without such a tubercle, but has a conspicuous one between each shoulder and the suture. The two specimens obtained differ somewhat in depth of colour, the blotch on each elytron of the smaller specimen being almost flavous; but otherwise they are in close agreement.

### SYARBIS ALBIVITTIS, n. sp.

Reddish, clothed with white scales, on the upper surface lineate in arrangement.

Rostrum slightly longer than wide, with a shallow median groove beginning at a deep interocular fovea. Antennae short, six apical joints of funicle transverse. Prothorax about as long as the basal width, evenly decreasing in width from base to apex; with crowded punctures, many of large size. Elytra about twice the width of prothorax, shoulders slightly thickened, a feeble posthumeral swelling; with regular rows of large, round, deep punctures, wider than interstices; of these the third is somewhat elevated on the basal half. Legs short, tibiae with strong denticulations. Length, 4-4·5 mm.

Queensland, Brisbane (J. H. Boreham). Type in Queensland Museum; co-type I. 16121, in South Australian Museum.

On the pronotum the clothing is somewhat as on *S. porcatus,* but it is very different on the elytra. On the pronotum the white scales form three distinct and two feeble lines; on the elytra they clothe the suture throughout, the third interstice to the middle, the fifth from the middle to near apex, the fourth for a short distance connecting the markings on the third and fifth, and near the sides from the shoulders to the suture; there are minute scales on most of the other parts of the elytra, but they do not interrupt the vittate appearance to the naked eye.

The description was drawn up from three Brisbane specimens: two others from Herberton (C. J. Wild) differ in being slightly more robust; the markings appear to be the same, but are somewhat obscured by chocolate or muddy-brown meal, of which there is not a trace on the Brisbane specimens.

### MINIA OPALESCENS, Pasc.

Referred with doubt by Pascoe to the Gonipterides; as its right to a position there seemed very doubtful, I asked for some information as to the type, and Dr. Marshall replied: "Unfortunately there is only one specimen of the species. The genus does not present to me any very obvious affinities. In Lacordaire's system it runs down to his Cleonides, being excluded from the Hyperides by its connate claws. I am, however, of opinion that in spite of this latter character it had better be placed temporarily in the Hyperides."

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